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CIK, MIROSLAV
HOEFNAGEL, EVERT W.

<120> NEUROTROPHIC FACTOR RECEPTOR

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<140> 10/019,337
<141> 2001-12-19

<150> PCT/EP00/04918
<151> 2000-05-26

<150> GB 9915200.1
<151> 1999-06-29

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<170> PatentIn Ver. 3.2

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 <213> Rattus rattus

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<212> DNA
<213> Rattus rattus

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 <213> Rattus rattus

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<210> 8
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 <212> PRT
 <213> Rattus rattus

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 35 40 45
 Gln Cys Gln Gln Leu Arg Ser Glu Tyr Val Ala Gln Cys Leu Gly Arg
 50 55 60
 Ala Gly Trp Arg Gly Pro Gly Ser Cys Val Arg Ser Arg Cys Arg Arg
 65 70 75 80
 Ala Leu Arg Arg Phe Phe Ala Arg Gly Pro Pro Ala Leu Thr His Ala
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 Leu Leu Phe Cys Gly Cys Glu Gly Pro Ala Cys Ala Glu Arg Arg Arg
 100 105 110
 Gln Thr Phe Ala Pro Ala Cys Ala Phe Ser Gly Pro Gln Leu Ala Pro
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Arg Pro Arg Leu Phe Ala Phe Gln Ala Ser Cys Ala Pro Ala Pro Gly
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Ser Arg Asp Gly Cys Pro Glu Glu Gly Gly Pro Arg Cys Leu Arg Ala
165 170 175

Tyr Ala Gly Leu Val Gly Thr Val Val Thr Pro Asn Tyr Leu Asp Asn
180 185 190

Val Ser Ala Arg Val Ala Pro Trp Cys Gly Cys Glu Ala Ser Gly Asn
195 200 205

Arg Arg Glu Glu Cys Glu Ala Phe Arg Lys Leu Phe Thr Arg Asn Pro
210 215 220

Cys Leu Asp Gly Ala Ile Gln Ala Phe Asp Ser Ser Gln Pro Ser Val
225 230 235 240

Leu Gln Asp Gln Trp Asn Pro Tyr Gln Asn Ala Gly Cys Cys Phe Leu
245 250 255

Trp Val Ser Ser Met Ser Ile Leu Thr Ala Leu Ala Leu Gln Ala Leu
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Leu

<210> 9

<211> 258

<212> PRT

<213> Rattus rattus

<400> 9

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35 40 45

Gln Cys Gln Gln Leu Arg Ser Glu Tyr Val Ala Gln Cys Leu Gly Arg
50 55 60

Ala Gly Trp Arg Gly Pro Gly Ser Cys Val Arg Ser Arg Cys Arg Arg
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Ala Leu Arg Arg Phe Phe Ala Arg Gly Pro Pro Ala Leu Thr His Ala
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Leu Leu Phe Cys Gly Cys Glu Gly Pro Ala Cys Ala Glu Arg Arg Arg
100 105 110

Gln Thr Phe Ala Pro Ala Cys Ala Phe Ser Gly Pro Gln Leu Ala Pro
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 Tyr Ala Gly Leu Val Gly Thr Val Val Thr Pro Asn Tyr Leu Asp Asn
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 Val Ser Ala Arg Val Ala Pro Trp Cys Gly Cys Glu Ala Ser Gly Asn
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 Glu Ala

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<220>
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21

<210> 11
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
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<400> 11
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<210> 12
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 <212> DNA
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<210> 13

<211> 22

<212> DNA

<213> Artificial Sequence

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<210> 14

<211> 24

<212> DNA

<213> Artificial Sequence

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<210> 15

<211> 22

<212> DNA

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<210> 16

<211> 24

<212> DNA

<213> Artificial Sequence

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<210> 17
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<212> DNA
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24

<210> 18
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<213> Artificial Sequence

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<210> 19
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<400> 20
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<210> 22
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 primer

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<400> 23
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<210> 24
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<210> 25
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 primer

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 <210> 26
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 <400> 29
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<400> 30
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<210> 31
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 <213> Artificial Sequence

<220>
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23

<210> 32
 <211> 431
 <212> PRT
 <213> Gallus gallus

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 35 40 45
 Cys Ile Ala Gly Asn Gly Ala Asn Lys Leu Gly Pro Asp Ala Lys Asn
 50 55 60
 Gln Cys Arg Ser Thr Val Thr Ala Leu Leu Ser Ser Gln Leu Tyr Gly
 65 70 75 80
 Cys Lys Cys Lys Arg Gly Met Lys Lys Glu Lys His Cys Leu Ser Val
 85 90 95
 Tyr Trp Ser Ile His His Thr Leu Met Glu Gly Met Asn Val Leu Glu
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 Ser Ser Pro Tyr Glu Pro Phe Ile Arg Gly Phe Asp Tyr Val Arg Leu
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Ala Ser Ile Thr Ala Gly Ser Glu Asn Glu Val Thr Gln Val Asn Arg
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 165 170 175
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 Asp Arg Val Pro Pro Glu Tyr Thr His Glu Leu Leu Phe Cys Pro Cys
 195 200 205
 Glu Asp Thr Ala Cys Ala Glu Arg Arg Arg Gln Thr Ile Val Pro Ala
 210 215 220
 Cys Ser Tyr Glu Ser Lys Glu Lys Pro Asn Cys Leu Ala Pro Leu Asp
 225 230 235 240
 Ser Cys Arg Glu Asn Tyr Val Cys Arg Ser Arg Tyr Ala Glu Phe Gln
 245 250 255
 Phe Asn Cys Gln Pro Ser Leu Gln Thr Ala Ser Gly Cys Arg Arg Asp
 260 265 270
 Ser Tyr Ala Ala Cys Leu Leu Ala Tyr Thr Gly Ile Ile Gly Ser Pro
 275 280 285
 Ile Thr Pro Asn Tyr Ile Asp Asn Ser Thr Ser Ser Ile Ala Pro Trp
 290 295 300
 Cys Thr Cys Asn Ala Ser Gly Asn Arg Gln Glu Glu Cys Glu Ser Phe
 305 310 315 320
 Leu His Leu Phe Thr Asp Asn Val Cys Leu Gln Asn Ala Ile Gln Ala
 325 330 335
 Phe Gly Asn Gly Thr Tyr Leu Asn Ala Ala Thr Ala Pro Ser Ile Ser
 340 345 350
 Pro Thr Thr Gln Met Tyr Lys Gln Glu Arg Asn Ala Asn Arg Ala Ala
 355 360 365
 Ala Thr Leu Ser Glu Asn Ile Phe Glu His Leu Gln Pro Thr Lys Val
 370 375 380
 Ala Gly Glu Glu Arg Leu Leu Arg Gly Ser Thr Arg Leu Ser Ser Glu
 385 390 395 400
 Thr Ser Ser Pro Ala Ala Pro Cys His Gln Ala Ala Ser Leu Leu Gln
 405 410 415
 Leu Trp Leu Pro Pro Thr Leu Ala Val Leu Ser His Phe Met Met
 420 425 430

<210> 33
 <211> 397
 <212> PRT
 <213> Mus musculus

<400> 33

Met	Gly	Leu	Ser	Trp	Ser	Pro	Arg	Pro	Pro	Leu	Leu	Met	Ile	Leu	Leu	1	5	10	15
Leu	Val	Leu	Ser	Leu	Trp	Leu	Pro	Leu	Gly	Ala	Gly	Asn	Ser	Leu	Ala	20	25	30	
Thr	Glu	Asn	Arg	Phe	Val	Asn	Ser	Cys	Thr	Gln	Ala	Arg	Lys	Lys	Cys	35	40	45	
Glu	Ala	Asn	Pro	Ala	Cys	Lys	Ala	Ala	Tyr	Gln	His	Leu	Gly	Ser	Cys	50	55	60	
Thr	Ser	Ser	Leu	Ser	Arg	Pro	Leu	Pro	Leu	Glu	Glu	Ser	Ala	Met	Ser	65	70	75	80
Ala	Asp	Cys	Leu	Glu	Ala	Ala	Glu	Gln	Leu	Arg	Asn	Ser	Ser	Leu	Ile	85	90	95	
Asp	Cys	Arg	Cys	His	Arg	Arg	Met	Lys	His	Gln	Ala	Thr	Cys	Leu	Asp	100	105	110	
Ile	Tyr	Trp	Thr	Val	His	Pro	Ala	Arg	Ser	Leu	Gly	Asp	Tyr	Glu	Leu	115	120	125	
Asp	Val	Ser	Pro	Tyr	Glu	Asp	Thr	Val	Thr	Ser	Lys	Pro	Trp	Lys	Met	130	135	140	
Asn	Leu	Ser	Lys	Leu	Asn	Met	Leu	Lys	Pro	Asp	Ser	Asp	Leu	Cys	Leu	145	150	155	160
Lys	Phe	Ala	Met	Leu	Cys	Thr	Leu	His	Asp	Lys	Cys	Asp	Arg	Leu	Arg	165	170	175	
Lys	Ala	Tyr	Gly	Glu	Ala	Cys	Ser	Gly	Ile	Arg	Cys	Gln	Arg	His	Leu	180	185	190	
Cys	Leu	Ala	Gln	Leu	Arg	Ser	Phe	Phe	Glu	Lys	Ala	Ala	Glu	Ser	His	195	200	205	
Ala	Gln	Gly	Leu	Leu	Leu	Cys	Pro	Cys	Ala	Pro	Glu	Asp	Ala	Gly	Cys	210	215	220	
Gly	Glu	Arg	Arg	Arg	Asn	Thr	Ile	Ala	Pro	Ser	Cys	Ala	Leu	Pro	Ser	225	230	235	240
Val	Thr	Pro	Asn	Cys	Leu	Asp	Leu	Arg	Ser	Phe	Cys	Arg	Ala	Asp	Pro	245	250	255	
Leu	Cys	Arg	Ser	Arg	Leu	Met	Asp	Phe	Gln	Thr	His	Cys	His	Pro	Met	260	265	270	

Asp Ile Leu Gly Thr Cys Ala Thr Glu Gln Ser Arg Cys Leu Arg Ala
275 280 285

Tyr Leu Gly Leu Ile Gly Thr Ala Met Thr Pro Asn Phe Ile Ser Lys
290 295 300

Val Asn Thr Thr Val Ala Leu Ser Cys Thr Cys Arg Gly Ser Gly Asn
305 310 315 320

Leu Gln Asp Glu Cys Glu Gln Leu Glu Arg Ser Phe Ser Gln Asn Pro
325 330 335

Cys Leu Val Glu Ala Ile Ala Ala Lys Met Arg Phe His Arg Gln Leu
340 345 350

Phe Ser Gln Asp Trp Ala Asp Ser Thr Phe Ser Val Val Gln Gln Gln
355 360 365

Asn Ser Asn Pro Ala Leu Arg Leu Gln Pro Arg Leu Pro Ile Leu Ser
370 375 380

Phe Ser Ile Leu Pro Leu Ile Leu Leu Gln Thr Leu Trp
385 390 395

<210> 34

<211> 444

<212> PRT

<213> Rattus rattus

<400> 34

Met Ile Leu Ala Asn Ala Phe Cys Leu Phe Phe Phe Leu Asp Glu Thr
1 5 10 15

Leu Arg Ser Leu Ala Ser Pro Ser Ser Leu Gln Gly Ser Glu Leu His
20 25 30

Gly Trp Arg Pro Gln Val Asp Cys Val Arg Ala Asn Glu Leu Cys Ala
35 40 45

Ala Glu Ser Asn Cys Ser Ser Arg Tyr Arg Thr Leu Arg Gln Cys Leu
50 55 60

Ala Gly Arg Asp Arg Asn Thr Met Leu Ala Asn Lys Glu Cys Gln Ala
65 70 75 80

Ala Leu Glu Val Leu Gln Glu Ser Pro Leu Tyr Asp Cys Arg Cys Lys
85 90 95

Arg Gly Met Lys Lys Glu Leu Gln Cys Leu Gln Ile Tyr Trp Ser Ile
100 105 110

His Leu Gly Leu Thr Glu Gly Glu Glu Phe Tyr Glu Ala Ser Pro Tyr
115 120 125

Glu Pro Val Thr Ser Arg Leu Ser Asp Ile Phe Arg Leu Ala Ser Ile
130 135 140

Phe Ser Gly Thr Gly Thr Asp Pro Ala Val Ser Thr Lys Ser Asn His
 145 150 155 160
 Cys Leu Asp Ala Ala Lys Ala Cys Asn Leu Asn Asp Asn Cys Lys Lys
 165 170 175
 Leu Arg Ser Ser Tyr Ile Ser Ile Cys Asn Arg Glu Ile Ser Pro Thr
 180 185 190
 Glu Arg Cys Asn Arg Arg Lys Cys His Lys Ala Leu Arg Gln Phe Phe
 195 200 205
 Asp Arg Val Pro Ser Glu Tyr Thr Tyr Arg Met Leu Phe Cys Ser Cys
 210 215 220
 Gln Asp Gln Ala Cys Ala Glu Arg Arg Arg Gln Thr Ile Leu Pro Ser
 225 230 235 240
 Cys Ser Tyr Glu Asp Lys Glu Lys Pro Asn Cys Leu Asp Leu Arg Ser
 245 250 255
 Leu Cys Arg Thr Asp His Leu Cys Arg Ser Arg Leu Ala Asp Phe His
 260 265 270
 Ala Asn Cys Arg Ala Ser Tyr Arg Thr Ile Thr Ser Cys Pro Ala Asp
 275 280 285
 Asn Tyr Gln Ala Cys Leu Gly Ser Tyr Ala Gly Met Ile Gly Phe Asp
 290 295 300
 Met Thr Pro Asn Tyr Val Asp Ser Asn Pro Thr Gly Ile Val Val Ser
 305 310 315 320
 Pro Trp Cys Asn Cys Arg Gly Ser Gly Asn Met Glu Glu Glu Cys Glu
 325 330 335
 Lys Phe Leu Arg Asp Phe Thr Glu Asn Pro Cys Leu Arg Asn Ala Ile
 340 345 350
 Gln Ala Phe Gly Asn Gly Thr Asp Val Asn Met Ser Pro Lys Gly Pro
 355 360 365
 Ser Leu Pro Ala Thr Gln Ala Pro Arg Val Glu Lys Thr Pro Ser Leu
 370 375 380
 Pro Asp Asp Leu Ser Asp Ser Thr Ser Leu Gly Thr Ser Val Ile Thr
 385 390 395 400
 Thr Cys Thr Ser Ile Gln Glu Gln Gly Leu Lys Ala Asn Asn Ser Lys
 405 410 415
 Glu Leu Ser Met Cys Phe Thr Glu Leu Thr Thr Asn Ile Ser Pro Gly
 420 425 430
 Ser Lys Lys Val Ile Lys Leu Asn Ser Gly Ser Ser
 435 440

<210> 35
 <211> 468
 <212> PRT
 <213> Rattus rattus

<400> 35

Met	Phe	Leu	Ala	Thr	Leu	Tyr	Phe	Ala	Leu	Pro	Leu	Leu	Asp	Leu	Leu	1	5	10	15
Met	Ser	Ala	Glu	Val	Ser	Gly	Gly	Asp	Arg	Leu	Asp	Cys	Val	Lys	Ala	20	25	30	
Ser	Asp	Gln	Cys	Leu	Lys	Glu	Gln	Ser	Cys	Ser	Thr	Lys	Tyr	Arg	Thr	35	40	45	
Leu	Arg	Gln	Cys	Val	Ala	Gly	Lys	Glu	Thr	Asn	Phe	Ser	Leu	Thr	Ser	50	55	60	
Gly	Leu	Glu	Ala	Lys	Asp	Glu	Cys	Arg	Ser	Ala	Met	Glu	Ala	Leu	Lys	65	70	75	80
Gln	Lys	Ser	Leu	Tyr	Asn	Cys	Arg	Cys	Lys	Arg	Gly	Met	Lys	Lys	Glu	85	90	95	
Lys	Asn	Cys	Leu	Arg	Ile	Tyr	Trp	Ser	Met	Tyr	Gln	Ser	Leu	Gln	Gly	100	105	110	
Asn	Asp	Leu	Leu	Glu	Asp	Ser	Pro	Tyr	Glu	Pro	Val	Asn	Ser	Arg	Leu	115	120	125	
Ser	Asp	Ile	Phe	Arg	Ala	Val	Pro	Phe	Ile	Ser	Asp	Val	Phe	Gln	Gln	130	135	140	
Val	Glu	His	Ile	Ser	Lys	Gly	Asn	Asn	Cys	Leu	Asp	Ala	Ala	Lys	Ala	145	150	155	160
Cys	Asn	Leu	Asp	Asp	Thr	Cys	Lys	Lys	Tyr	Arg	Ser	Ala	Tyr	Ile	Thr	165	170	175	
Pro	Cys	Thr	Thr	Ser	Met	Ser	Asn	Glu	Val	Cys	Asn	Arg	Arg	Lys	Cys	180	185	190	
His	Lys	Ala	Leu	Arg	Gln	Phe	Phe	Asp	Lys	Val	Pro	Ala	Lys	His	Ser	195	200	205	
Tyr	Gly	Met	Leu	Phe	Cys	Ser	Cys	Arg	Asp	Ile	Ala	Cys	Thr	Glu	Arg	210	215	220	
Arg	Arg	Gln	Thr	Ile	Val	Pro	Val	Cys	Ser	Tyr	Glu	Glu	Arg	Glu	Arg	225	230	235	240
Pro	Asn	Cys	Leu	Ser	Leu	Gln	Asp	Ser	Cys	Lys	Thr	Asn	Tyr	Ile	Cys	245	250	255	
Arg	Ser	Arg	Leu	Ala	Asp	Phe	Phe	Thr	Asn	Cys	Gln	Pro	Glu	Ser	Arg	260	265	270	

Ser Val Ser Asn Cys Leu Lys Glu Asn Tyr Ala Asp Cys Leu Leu Ala
 275 280 285
 Tyr Ser Gly Leu Ile Gly Thr Val Met Thr Pro Asn Tyr Val Asp Ser
 290 295 300
 Ser Ser Leu Ser Val Ala Pro Trp Cys Asp Cys Ser Asn Ser Gly Asn
 305 310 315 320
 Asp Leu Glu Asp Cys Leu Lys Phe Leu Asn Phe Phe Lys Asp Asn Thr
 325 330 335
 Cys Leu Lys Asn Ala Ile Gln Ala Phe Gly Asn Gly Ser Asp Val Thr
 340 345 350
 Met Trp Gln Pro Ala Pro Pro Val Gln Thr Thr Thr Ala Thr Thr Thr
 355 360 365
 Thr Ala Phe Arg Val Lys Asn Lys Pro Leu Gly Pro Ala Gly Ser Glu
 370 375 380
 Asn Glu Ile Pro Thr His Val Leu Pro Pro Cys Ala Asn Leu Gln Ala
 385 390 395 400
 Gln Lys Leu Lys Ser Asn Val Ser Gly Ser Thr His Leu Cys Leu Ser
 405 410 415
 Asp Ser Asp Phe Gly Lys Asp Gly Leu Ala Gly Ala Ser Ser His Ile
 420 425 430
 Thr Thr Lys Ser Met Ala Ala Pro Pro Ser Cys Ser Leu Ser Ser Leu
 435 440 445
 Pro Val Leu Met Leu Thr Ala Leu Ala Ala Leu Leu Ser Val Ser Leu
 450 455 460
 Ala Glu Thr Ser
 465

<210> 36
 <211> 13
 <212> DNA
 <213> Rattus rattus

<400> 36
 gaggtaagga ggt

13

<210> 37
 <211> 13
 <212> DNA
 <213> Rattus rattus

<400> 37
 ccctcaccag ggt

13

<210> 38
<211> 13
<212> DNA
<213> Rattus rattus

<400> 38
ccggtgcgtg cgg

13

<210> 39
<211> 13
<212> DNA
<213> Rattus rattus

<400> 39
gcgcgcgcag gcc

13

<210> 40
<211> 13
<212> DNA
<213> Rattus rattus

<400> 40
taggtacgct ggg

13

<210> 41
<211> 13
<212> DNA
<213> Rattus rattus

<400> 41
gtccctgcag gca

13

<210> 42
<211> 13
<212> DNA
<213> Rattus rattus

<400> 42
tgggtgaggg ggc

13

<210> 43
<211> 13
<212> DNA
<213> Rattus rattus

<400> 43
cactccatag atg

13

<210> 44
<211> 13
<212> DNA
<213> Rattus rattus

<400> 44
cgggtaggta tgg

13

<210> 45
<211> 13
<212> DNA
<213> Rattus rattus

<400> 45
tgggtgctgt ttc

13

<210> 46
<211> 13
<212> DNA
<213> Rattus rattus

<400> 46
ttgtcccaag gtg

13

<210> 47
<211> 13
<212> DNA
<213> Rattus rattus

<400> 47
cccttctcag gca

13

<210> 48
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
6xHis tag

<400> 48
His His His His His His
1 5